Pool Noodle Boat

Explore how things float!

Kit contains:

- 1 Piece of pool noodle
- 1 Straw
- 1 Foam rectangle

You will need: water and markers for coloring (optional).

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INSTRUCTIONS

Step 1. Decorate the foam rectangle. This will become your boat's "sail."

Step 2. Thread the straw through the holes in the foam rectangle.

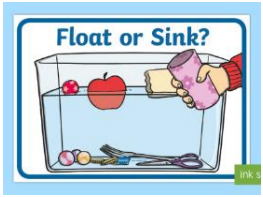
Step 3. Push the straw into the hole in the pool noodle.

Step 4. Test your pool noodle boat in water!

EXPLORING BUOYANCY

In science, Buoyancy is a force that makes things rise. How buoyant something is depends on density. **Density** is how much "stuff" (mass) there is in a certain amount of space (volume). Things that have more density will sink, and things that have less density will float. Sometimes bigger things are more dense, but not always! Even though a basketball is bigger than a pebble, the basketball will float and the pebble will sink. The basketball is full of air and the pebble has almost no air in it.

EXPERIMENT: FLOAT OR SINK?



1. Get some water! Fill a sink, bathtub, bucket, or bowl about half-way. Be sure to have towels in case of spills!
2. Gather waterproof objects to test. Choose lots of things that you think will sink and lots that you think will float. Be sure to include your boat!
3. Put the items one by one in the water and observe if they float or sink.
4. Talk about which items floated and which sank. Why do you think this happened? Did any of the results surprise you?

Explore the Scientific Method!

Before you start your experiment, talk about what you want to find out (stating your purpose). Next, predict which items will float and which will sink (making a hypothesis). As you test various items, write/draw which ones floated and which ones sank (recording your data). Then, talk about which of your predictions were correct and which were incorrect, and tell someone else about your experiment (creating a conclusion and sharing results).

LEARN MORE ABOUT IT!

Websites:

- https://www.pbs.org/parents/crafts-and-experiments/sink-or-float-experiment
- https://tinkerlab.com/buoyancy-for-kids-will-it-sink-or-float/

Books (Available at MGPL):

- *Busy Boats* by Susan Steggall
- *Boats Float!* by George Ella Lyon
- *Boats on the Bay* by Jeanne W. Harvey
- *Boats for Bedtime* by Olga Litowinsky
- *I Love Boats* by Flora McDonnell
- *Sail Away, Little Boat* by Janet Buell
- *Boat Works* by Tom Slaughter
- *Boats Go* by Steve Light
- *Boats Are Busy* by Sarah Gillingham
- *Things That Float and Things That Don't* by David A. Adler
- *What Floats in a Moat?* by Lynne Berry
- *Will It Float or Sink?* by Melissa Stewart
- *Floating and Sinking* by Jack Challoner
- *Boats, Ships, Submarines and Other Floating Machines* by Ian Graham